



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,974	07/09/2003	Frederick E. Shelton IV	END909.0511036	1303
7590 06/09/2005			EXAMINER	
FROST BROWN TODD LLC 2200 PNC Center 201 E. Fifth Street Cincinnati, OH 45202-4182			DURAND, PAUL R	
			ART UNIT	PAPER NUMBER
			3721	

DATE MAILED: 06/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

6

Office Action Summary	Application No. 10/615,974	Applicant(s) SHELTON ET AL.	
	Examiner Paul Durand	Art Unit 3721	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14, 16 and 18 is/are rejected.
- 7) ☒ Claim(s) 15-17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5/4/05</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 5/4/2005 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3 and 6-14, 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Green et al (US 6,619,529) in view of Morales (DE 195 20 717).

In regard to claim 1, 6, 11, 14 and 18, Green discloses the invention substantially as claimed including a surgical instrument comprised of handle 62 of a handle portion generally indicated by the housing 52, shaft 54, which transfers the articulation and firing motions, end effector, comprised of anvil 56 and cartridge section 58 which contains cutting channel, and a firing mechanism, which runs through the articulation

Art Unit: 3721

mechanism and the end effector comprised of cam bars 286, 288 and cutter 240, with sloped cam sections 290, that have a first thickness in a vertical direction which is different than the leg portion (see Figs. 1,21-24, C7,L1-32 and C11 L32-67). What Green does not disclose is a firing mechanism that varies in thickness transversely or horizontally. However, Morales teaches that it is old and well known in the art of articulating surgical tools to provide an articulated tool with a shaft on the from of sheath 14, that contains an actuation device 4 having a fist thickness, and an articulation portion comprised of elongated strip or longitudinal shaft 15, having a thickness that is less than the actuation portion for the purpose of preventing binding when articulating a tool (see Figs. 1-3 and Pgs. 2-7). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided the invention of Green with the articulation device as taught by Bishop for the purpose of preventing binding when articulating a tool.

In regard to claim 2, Green discloses the invention substantially as claimed including pivoted end effector comprised of anvil 56, cartridge section 58, with the actuation portion containing cutter 240 (see Figs.22-24 and C11,L32-55).

In regard to claims 3,8 and 9, Green discloses the invention substantially as claimed including channel 274 coupled to the handle portion through shaft 54, for receiving a staple cartridge, wedges in the form of cam members 290 for driving the staples, anvil 56, cutting member 240, which travels in channel 282 and leg portion of cam bars 286 and 288, which function as middle members to move the cam members 290 (see Fig. 1 and C12,L1-46).

In regard to claims 7, 10 and 16, Green discloses the invention substantially as claimed including spacing the anvil from the elongate channel during operation and an upper feature comprised of cam surface 290, which is slidably engaged with the anvil and a lower portion 288, which is engaged in the lower channel (see Figs. 16, 17 and C13, L10-36).

In regard to claims 12 and 13, Green discloses the invention substantially as claimed including a handle or body portion with means to separately transfer motion through shaft 182 for articulation through cable 442 and pulley 440, and for actuation through member 192, which attaches to cam bars 286 and 288 (see Figs. 15, 16, 20-22, C13, L24-32 and C15, L1-22).

4. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Green et al and of Morales as applied to claims 1-3 and in view of Bolanos et al (US 5,575,799).

The modified invention of Green discloses the invention substantially as claimed except for the use of gears to articulate the end effector. However, Bolanos teaches that it is old and well known in the art of surgical tools to provide a hollow shaft 103, containing gear 36, that converts the rotational motion from the body or handle portion 111 to articulated motion for the end effector 107 for the purpose of efficiently moving a tool in a confined area (see Figs. 1-3, C3, L44 – C4, L41). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided the modified invention of Green with the articulation means as taught by Bolanos for the purpose of efficiently moving a tool in a confined area.

Art Unit: 3721

Allowable Subject Matter

5. Claims 15 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

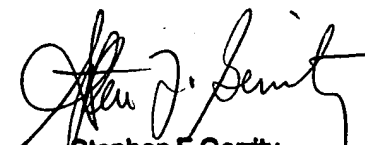
Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Durand whose telephone number is 571-272-4459. The examiner can normally be reached on 0730-1800, Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I. Rada can be reached on 571-272-4467. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Paul Durand
June 7, 2005


Stephen F. Gerrity
Primary Examiner